## MINUTES OF THE HIGHER EDUCATION APPROPRIATIONS SUBCOMMITTEE

WEDNESDAY, JANUARY 24, 2001, 2:00 P.M.

Room 223, State Capitol Building

Members Present: Sen. Lyle Hillyard, Committee Co-Chair

Sen. Peter Knudson Sen. Paula Julander Sen. Steve Poulton Rep. Patrice M. Arent Rep. Katherine M. Bryson Rep. Margaret Dayton Rep. Patricia W. Jones

Rep. LaWanna "Lou" Shurtliff Rep. Richard M. Siddoway Rep. Gordon E. Snow Rep. Stephen H. Urquhart

Members Excused: Rep. Afton Bradshaw, Committee Co-Chair

Rep. Martin R. Stephens

Staff Present: Boyd A. Garriott, Senior Legislative Fiscal Analyst

Debra Headden, Legislative Fiscal Analyst

Rolayne Day, Secretary

Public Speakers Present: Commissioner Cecelia Foxley

Governor Michael O. Leavitt Clyde M. Heiner, Consonus, Inc.

Richard Nelson, Pres. & CEO Utah Information Technologies Association

Dean Gerald B. Stringfellow, College of Engineering, UU

John M. Hill, VP, Human Resources, L-3 Communications Systems-West

Dean Warren R. Hill, College of Applied Science & Tech., WSU Karen Vauk, Executive Director, Micron Technology Foundation Malcom M. Crawford, Department Chair, Pre-Engineering UVSC

Dean A. Bruce Bishop, College of Engineering, USU

Dr. David Pershing, Sr. Vice President for Academic Affairs, UU

Charlie Johnson, Chair, Utah State Board of Regents Dr. Michael Peterson, Associate Commissioner, USHE

President Kerry Romesberg, UVSC

President Kermit Hall, USU

Fred Hunsaker, Vice President for Business, USU

Visitor List on File

Committee Co-Chair Hillyard called the meeting to order at 2:04 p.m.

1. S.B. 61, Enhancements to the State Systems of Public and Higher Education—Gov. Michael Leavitt discussed S.B. 61 (the Engineering Initiative), and how it will help to provide better jobs for Utahns. A solid economy depends on a solid education system and vice versa; they are interdependent. Studies indicate that 70% of Utah's future jobs will be technology related. He doesn't want just *more* jobs for

Utahns, he wants more *good* jobs. Ironically, the percentage of graduates in computer areas has diminished in the last few years. S.B. 61 is a plan to double the number of engineering and computer science graduates in the next five years and triple that number in eight years. The bill also provides \$10 million (\$5 million in one-time and \$5 million in on-going funds) for equipment and faculty. Other pieces of the Initiative to fund new engineering buildings and funding to develop interest for engineering in junior high and high school students will be taken care of in separate legislation.

S.B. 61 does, however, include incentives for current teacher retention and a program to help teachers get the advanced degrees and training they need to teach advanced math, science, and technology. The teachers would then be obligated to teach for a period of time in the schools.

Sen. Hillyard said that all the bills relating to the Engineering Initiative must be passed to make it all work and that the Higher Education Subcommittee must also fund various requests from the Board of Regents. Several higher education and business representatives testified on behalf of S.B. 61 including Clyde M. Heiner, Consonus, Inc.; Richard Nelson, President & CEO Utah Information Technologies Association; Dean Gerald B. Stringfellow, College of Engineering, University of Utah; John M. Hill, Vice President, Human Resources, L-3 Communications Systems-West; Dean Warren R. Hill, College of Applied Science & Technology, Weber State University; Karen Vauk, Executive Director, Micron Technology Foundation; Malcom M. Crawford, Pre-Engineering Department Chair, Utah Valley State College; Dean A. Bruce Bishop, College of Engineering, Utah State University; and Dr. David Pershing, Sr. Vice President for Academic Affairs, University of Utah.

Gov. Leavitt said many more businesses are hungry to hire engineers. Higher education is the engine of economic expansion and we must move forward quickly to accomplish the task; there isn't time for a lengthy debate on the issues. There are many levels of education needed from certificates to Ph.Ds so all institutions and the ATCs must play a role. Rep. Dayton noted that many support staff will also be needed.

Sen. Hillyard asked what incentives there are for people to pursue advanced degrees when they can make high salaries in business right after an initial degree. Dean Bishop said the institutions must be salary competitive. Dean Hill said they are already using faculty incentives at Weber by paying for teachers' advanced degrees in return for the promise of staying at the institution for a time period. He also indicated that there are outreach programs throughout the higher education system to recruit women, minorities, and even high school students into engineering. Dean Bishop said that 75% of USU's engineering graduates stay in Utah to work and that many come back to Utah after working elsewhere. Both Iomega and Micron were started by USU graduates who worked out-of-state first. The Governor said institutions are committed to reallocating resources to match funding for the Engineering Initiative.

**MOTION**: Rep. Siddoway moved to approve minutes of the January 19, 2001, meeting.

The motion passed unanimously with Sen. Poulton absent at the time of voting.

2. <u>Engineering Initiative</u>—Charlie Johnson, Chair, Board of Regents, said the Engineering Initiative is a very bold, but important proposal with all institutions participating in some way. Reallocating funds will be a difficult but necessary task. They are also making plans to attract high school students into the college and university programs.

Dr. Michael Peterson, USHE, distributed copies of the Engineering, Computer Science, and Technology Initiative. Rep. Bryson asked where higher education expects to find engineers willing to teach the courses.

Dr. Pershing was positive about the ability to hire qualified people. Utah is a good place to live and the universities have great reputations. They also expect to easily find contributors for the buildings.

Rep. Shurtliff asked if the reallocations will hurt other programs. Dr. Pershing indicated that it will be part of an on-going process that moves resources where the student demands are. President Kerry Romesberg, Utah Valley State College, said a large number of support technicians will be necessary and that training falls to the community and state colleges. He said that some areas will suffer because of reallocations, but the money must go where it is needed.

Sen. Hillyard asked about in-house training of engineers and how that will affect the Initiative. Dr. Pershing said that even though some positions might be labeled "engineer," they are not in fact engineers without the proper license and education available only through accredited institutions. Ms. Vauk said that in-house training is not as common as it used to be.

Rep. Jones expressed concern that reallocations will be at the detriment of the humanities. Mr. Johnson said there will always be a place for humanities, but for now, engineering will just grow faster. President Hall said the core values of education are still necessary because engineers must be well rounded to be good engineers.

Sen. Knudson asked if there was articulation with public education. President Hall said part of the initiative is to assess resources and they must plan for qualified teachers at all levels. Boyd Garriott, Legislative Fiscal Analyst, asked how the institutions plan to accommodate the students when the earliest the proposed buildings will be online is two years; what lab space and computers will be used. Mr. Johnson said they had to start somewhere and implement as they can.

- 3. <u>H.B. 223, Appropriation for Utah Semiconductor Technical Center</u>—Rep. Bryson presented H.B. 223 to the Committee. The bill would allocate \$500,000 to create the Utah Semiconductor Technical Center at Utah Valley State College. Karen Vouk, Micron Technologies, said this would help supply critical technicians to the industry. The Center would support training efforts from high school through a two-year degree and continuing through a four-year degree. It allows people to grow in their careers along with their education. President Romesberg said Micron has agreed to share employees to teach some of the courses relating to specific technologies.
- 4. <u>Utah State University</u>—President Kermit Hall said USU has notable achievements in their Extension, Environmental Research, Education Research, and Space Dynamics Research programs. He sees USU ranking alongside Iowa State, North Carolina State, Virginia Tech, Purdue, and Washington State—all land-grant universities strong in engineering, science, technology, education, business, agriculture, and natural resources. Utah State will be making choices to raise their benchmark. To achieve their goals, they will allocate resources as necessary, identify their strength, focusing on those resources, and will use finite resources to bring about infinite possibilities.

Immediate concerns include faculty and staff salaries, increases in power and natural gas rates, the rising cost of health benefits, and O & M for new facilities. President Hall said the funding formula and the Regents' master plan breaks the pattern of taking on more students than resources can handle. USU's priorities include engineering, science and technology, teacher training, business, agriculture, and natural resources.

Rep. Bryson expressed frustration that students who could become the very teachers that interest children in engineering are being turned away. She asked if there weren't some places that could be used for classrooms rather than turn away these students. President Hall said when it comes to teaching science

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and technology, the appropriate facilities are necessary to keep up with the rapid advancements. President Hall said something must be done about the retention problem where they bring students to the institution and then cannot fulfill their expectations because they don't have the resources to let students into various programs.

5. <u>Utah Valley State College</u>—President Kerry Romesberg distributed handouts showing that UVSC is the fastest growing institution in the State. Non-credit enrollments show that they are touching the lives of people in their community as well. UVSC continues to grow because of the phenomenal growth in Utah County.

President Romesberg said it isn't true that they are chasing enrollments. In fact, if they hire full-time faculty for increased enrollments, they actually lose money. To address the problem, they hire adjunct faculty, something that solves the immediate problem, but is not good for the students nor UVSC's accreditation. Even though they have been able to hire outstanding adjunct faculty, these faculty are not available to the students and don't develop curriculum or do other work that full-time faculty do. This causes the quality of the institution to slowly degenerate and students do not get the kind of education and support they deserve. Even though UVSC's tuition is too high for an institution of their type, they will be forced to raise tuition to make up the funding difference. Without increased State funding, there is no other way for them to address their needs.

President Romesberg discussed their request for enrollment growth funding, O & M of new facilities, and salary equity. He also discussed one-time and supplemental requests for instructional equipment and O & M on new facilities.

UVSC's strength is found in continuing their community college mission as well as developing their fouryear college component. They have exceptional programs in elementary education, computer science, business (e-commerce), and aviation. President Romesberg said they support the new funding formula. They also have an enormous ratio of students per advisor that keeps students from getting through the system in a timely manner.

MOTION: Rep. Dayton moved to adjourn.

Committee Co-Chair Hillyard adjourned the meeting at 5:01 p.m.

Minutes were reported by Rolayne Day, Secretary.

Sen. Lyle Hillyard, Committee Co-Chair	Rep. Afton Bradshaw, Committee Co-Chair